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Preston F. Crow

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PRESTON F. CROW, ROBERT S. MASON JR.,
STEVEN T. MCCLURE, SUSAN C. NAGY, and
RICHARD G. WHEELER

Appeal 2009-005325
Application 10/644,458
Technology Center 2100

Decided: April 21, 2010

Before JOSEPH L. DIXON, JAY P. LUCAS, and STEPHEN C. SIU,
Administrative Patent Judges.

SIU, *Administrative Patent Judge.*

DECISION ON APPEAL
STATEMENT OF THE CASE

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1, 2, 4-6, 13, 14, and 16. Claims 3, 7-12, and 15 are canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Invention

The invention relates to extent based file systems (Spec. 1, ll. 5-6).

Independent claim 1 is illustrative:

1. A memory storage device having an operating system which uses at least one inode for accessing file segments, the inode comprising:

a plurality of rows; and

a portion of the rows storing extents pointing to data blocks, each extent having a field to indicate whether the extent is an indirect extent, a hole extent or a direct extent.

References

The Examiner relies upon the following references as evidence in support of the rejection:

Soltis US 2004/0133570 A1 Jul. 8, 2004

Appellants' Admitted Prior Art, *Background of the Invention*, Spec. 1-2, Fig. 1 ("AAPA").

Rejection

Claims 1, 2, 4-6, 13, 14, and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA and Soltis.

ISSUE

The Examiner finds that in Soltis "each extent includes a flag or a fi[el]d to indicate the type of that extent" (Ans. 6).

Appellants submit that Soltis does not teach or suggest “the desirability of making his extent capable of indicating whether the extent is an *indirect extent*, a hole extent, or a direct extent” (App. Br. 12). Appellants further argue that Soltis teaches away from the Examiner’s suggested combination because Soltis states that “additional indirection ‘requires extra data transfers’, which, as is known in the art, is undesirable” (*id.*).

Issue: Did the Examiner err in finding that Soltis would have taught or suggested extents each having a field to indicate whether the extent is an indirect extent, a hole extent, or a direct extent?

FINDING OF FACT

The following Finding of Fact (FF) is shown by a preponderance of the evidence:

Soltis teaches that “each extent 184 includes a flag The flag determines whether or not the extent addresses real-data or a hole in the file” (§ [0079]).

PRINCIPLES OF LAW

Claim interpretation

“In the patentability context, claims are to be given their broadest reasonable interpretations. . . . [L]imitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citations omitted). A claim meaning is reasonable if one of ordinary skill in the art would understand the claim, read in light of the

specification, to encompass the meaning. *See In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

For purposes of claim validity, alternatives within an element written in Markush form are treated as functionally equivalent. *See In re Skoll*, 523 F.2d 1392, 1397 (CCPA 1975). The entire element is disclosed by prior art that discloses at least one alternative in the Markush group. *See Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 582 F.3d 1288, 1298 (Fed. Cir. 2009).

ANALYSIS

Appellants challenge the finding that Soltis would have taught or suggested the claimed extent field. Based on Appellants' arguments in the Appeal Brief, we will decide the appeal of claims 1, 2, 4-6, 13, 14, and 16 on the basis of claim 1 alone. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Claim 1 recites "each extent having a field to indicate whether the extent is an indirect extent, a hole extent or a direct extent" (claim 1). The types of extents (indirect, hole, or direct) are listed as alternatives. The disclosure of any of these alternatives thus discloses the entire element (the field indicating the extent type). *See Fresenius USA*, 582 F.3d at 1298.

Soltis discloses that each extent includes a flag that determines whether the extent addresses real-data or represents a hole in the file (FF). Even assuming Appellants' argument to be correct that Soltis supposedly fails to disclose a field indicating whether an extent is an indirect extent, we are unpersuaded by Appellants' arguments because claim 1 does not require a field indicating whether an extent is an indirect extent. Rather, claim 1

merely requires a field indicating whether an extent is an indirect extent, a hole extent *or* a direct extent. Soltis discloses extents each having a field (flag) to indicate whether the extent is at least one of the elements recited in the alternative in claim 1 (in this case, a hole extent (represents a hole in the file) or a direct extent (addresses real-data)).

For at least these reasons, we find no evidence persuasive of error in the Examiner's 35 U.S.C. § 103(a) rejection of claim 1, and claims 2, 4-6, 13, 14, and 16 which fall therewith.

CONCLUSIONS OF LAW

Based on the findings of facts and analysis above, we conclude that Appellants have not demonstrated that the Examiner erred in finding that Soltis would have taught or suggested extents each having a field to indicate whether the extent is an indirect extent, a hole extent, or a direct extent.

DECISION

We affirm the Examiner's decision rejecting claims 1, 2, 4-6, 13, 14, and 16 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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